

EMOTIONS & THE BRAIN ACTIVITY

BRAIN BREAK FOR GRADES 9-12

Title: Emotions & the Brain Activity

Setting: In Classroom or on Video Conference

Time Frame: 25 Minutes

Paired Dana Foundation Fact Sheets: 9th-12th Grade How Does the Brain Work?

ACTIVITY DETAILS

Teacher Background:

Taking care of our mental health is an important way to take care of our brains as well as our bodies. Scientists who study mental health, the brain, and emotions agree that learning how to regulate our feelings and emotions is an important coping skill associated with good mental health and one that can be practiced and sharpened. Let's take a closer look at what is happening in the brain when someone is experiencing emotions and complete a short activity exploring personal emotional regulation strategies.

Personal experiences get processed in two major networks of the brain: the "emotional brain" or limbic system, and the "rational brain" or prefrontal cortex and its connections to other structures. The limbic system consists of the limbic cortex, amygdala, and hippocampus and is more primitive, triggering immediate impulsive reactions such as fear, anxiety, and anger. The prefrontal cortex is the slower, decision-making, logical, and planning part of the brain that can override the limbic system, leading to impulse control. The prefrontal cortex is one of the last brain regions to develop for humans, and remains immature through adolescence and into young adulthood.

If the limbic system goes unchecked, the resulting emotional responses generate stress. To prevent this from happening, teenagers can develop strategies that divert the processing of the situation from the limbic system to the prefrontal cortex. That is, replace a purely emotional response with focus, intention, and logical decision-making. For example, when dealing with a strong emotion, a teenager might talk with a parent or take space from a situation through exercise or meditation. Have the students do a quick exercise outlining their emotional resources that aid in regulation.

Procedure:

1. Have students read paired Dana Foundation Fact Sheet: 9th-12th Grade How Does the Brain Work?
Downloadable here: <https://on.dana.org/factsheets-kids>. (5 min)
2. Show the accompanying PowerPoint slide about emotions and the brain. (5 min)
3. Have students recall and list five effective strategies they use to regulate their emotions. Each person shares one strategy with the class. (15 min)

